In the Claims:

Please amend the claims as follows:

1. (Currently Amended) A method for producing a high stability, low emission, invert fuel emulsion composition, comprising:

blending a flow of additives including a surfactant package with a flow of a hydrocarbon petroleum distillate fuel in a first in-line blending station to create a first composition, said surfactant package includes a primary surfactant, a block copolymer, and a polymeric dispersant, and said hydrocarbon petroleum distillate fuel is a continuous phase of the emulsion;

blending purified water with said first composition in a second in–line blending station to produce a second composition;

aging said second composition to produce an aged composition; and

passing said aged composition through a shear pump responsive to producing said aged composition.

2. (Original) The method of Claim 1, wherein said aging is temperature dependent.

3. (Original) The method of Claim 1, wherein the emulsion is about 5 wt.% to about 50 wt.% of said purified water and about 50 wt.% to about 95 wt.% of said hydrocarbon petroleum distillate fuel.

4. (Original) The method of Claim 1, wherein said primary surfactant is about 3,000 parts per million to about 10,000 parts per million.

5. (Original) The method of Claim 1, wherein said primary surfactant is selected from a group consisting of nonionic surfactants, anionic surfactants, and amphoteric surfactants.

6. (Original) The method of Claim 1, wherein said primary surfactant is selected from a group consisting of unsubstituted, mono-substituted amides of saturated C_{12}-C_{22} fatty acids, unsubstituted, di-substituted amides of saturated C_{12}-C_{22} fatty acids, unsubstituted, mono-substituted amides of unsaturated C_{12}-C_{22} fatty acids, and unsubstituted, di-substituted amides of unsaturated C_{12}-C_{22} fatty acids.

7. (Previously Presented) The method of Claim 6, wherein said mono-substituted amides and di-substituted amides are substituted by substituents selected, independently of each other, from a group consisting of straight and branched, unsubstituted alkyls having 1 to 4 carbon atoms, straight and branched, substituted alkyls having 1 to 4 carbon atoms, straight and branched, unsubstituted alkanols having 1 to 4 carbon atoms, straight and branched, substituted alkanols having 1 to 4 carbon atoms, and aryls.

8. (Original) The method of Claim 1, wherein said primary surfactant is a 1:1 fatty acid diethanolamide of oleic acid.

9. (Original) The method of Claim 1, wherein said block copolymer is at about 1,000 ppm to about 5,000 ppm.

10. (Original) The method of Claim 1, wherein said block copolymer is an ethylene oxide/propylene oxide block copolymer.

11. (Original) The method of Claim 1, wherein said block copolymer is selected from a group consisting of an ethylene oxide/propylene oxide block copolymer having about 10 wt.% to about 40 wt.% ethylene oxide and an ethylene oxide/propylene oxide block copolymer having about 900 molecular weight to about 2,500 molecular weight propylene oxide.

12. (Original) The method of Claim 1, wherein said block copolymer is selected from a group consisting of an ethylene oxide/propylene oxide block copolymer having about 20 wt.% ethylene oxide and an ethylene oxide/propylene oxide block copolymer having about 1,700 molecular weight propylene oxide.

13. (Original) The method of Claim 1, wherein said polymeric dispersant is at about 100 ppm to about 1,000 ppm.

14. (Original) The method of Claim 1, wherein said polymeric dispersant is a non-ionic polymeric dispersant.

Claims 15-17 (Canceled)

18. (Original) The method of Claim 1, wherein the emulsion has an average droplet size of less than about 1 micron.

19. (Original) The method of Claim 1, wherein the emulsion has an average droplet size of about 0.1 microns to about 1 micron.

20. (Original) The method of Claim 1, further comprising:

at least one component selected from a group consisting of lubricants, corrosion inhibitors, antifreezes, ignition delay modifiers, cetane improvers, stabilizers, and rheology modifiers.

21. (Original) The method of Claim 20, wherein said flow of additives comprises said surfactant package and at least one of said at least one component.

22. (Original) The method of Claim 20, wherein said flow of additives comprises a flow of said antifreeze and at least one of said at least one component blended in a third in-line blending station.

Claims 23-29 (Canceled)

30. (Currently Amended) A high stability, low emission, invert fuel emulsion composition resulting from the method comprising:

blending a flow of additives including a surfactant package and a flow of hydrocarbon petroleum distillate fuel to form a first composition in a first in-line blending station, said hydrocarbon petroleum distillate fuel is a continuous phase of the emulsion, and wherein said surfactant package comprises a primary surfactant, a block copolymer, and a polymeric dispersant;

blending a flow of purified water to said first composition in a second in-line blending station to form a second composition;

aging said second composition to form an aged composition; and

passing said aged composition through a shear pump responsive to forming said aged composition.

31. (Original) The emulsion composition of Claim 30, wherein said aging is temperature dependent.

32. (Original) The emulsion composition of Claim 30, wherein the emulsion is about 5 wt.% to about 50 wt.% purified water and about 50 wt.% to about 95 wt.% hydrocarbon petroleum distillate fuel.

33. (Original) The emulsion composition of Claim 30, wherein said primary surfactant is about 3,000 parts per million to about 10,000 parts per million.

34. (Original) The emulsion composition of Claim 30, wherein said primary surfactant is selected from a group consisting of nonionic surfactants, anionic surfactants, and amphoteric surfactants.

35. (Original) The emulsion composition of Claim 30, wherein said primary surfactant is selected from a group consisting of unsubstituted, mono-substituted amides of saturated C_{12}-C_{22} fatty acids, unsubstituted, di-substituted amides of saturated C_{12}-C_{22} fatty acids, unsubstituted, mono-substituted amides of unsaturated C_{12}-C_{22} fatty acids, and unsubstituted, di-substituted amides of unsaturated C_{12}-C_{22} fatty acids.

36. (Previously Presented) The emulsion composition of Claim 35, wherein said mono-substituted amides and di-substituted amides are substituted by substituents selected, independently of each other, from a group consisting of straight and branched, unsubstituted alkyls having 1 to 4 carbon atoms, straight and branched, substituted alkyls having 1 to 4 carbon atoms, straight and branched, unsubstituted alkanols having 1 to 4 carbon atoms, straight and branched, substituted alkanols having 1 to 4 carbon atoms, and aryls.

37. (Original) The emulsion composition of Claim 30, wherein said primary surfactant is a 1:1 fatty acid diethanolamide of oleic acid.

38. (Original) The emulsion composition of Claim 30, wherein said block copolymer is about 1,000 ppm to about 5,000 ppm.

39. (Original) The emulsion composition of Claim 30, wherein said block copolymer is an ethylene oxide/propylene oxide block copolymer.

40. (Original) The emulsion composition of Claim 30, wherein said block copolymer is selected from a group consisting of an ethylene oxide/propylene oxide block copolymer having about 10 wt.% to about 40 wt.% ethylene oxide and an ethylene oxide/propylene oxide block copolymer having about 900 molecular weight to about 2,500 molecular weight propylene oxide.

41. (Original) The emulsion composition of Claim 30, wherein said block copolymer is selected from a group consisting of an ethylene oxide/propylene oxide block copolymer having about 20 wt.% ethylene oxide and an ethylene oxide/propylene oxide block copolymer having about 1,700 molecular weight propylene oxide.

42. (Original) The emulsion composition of Claim 30, wherein said polymeric dispersant is about 100 ppm to about 1,000 ppm.

43. (Original) The emulsion composition of Claim 30, wherein said polymeric dispersant is a non-ionic polymeric dispersant.

Claims 44-46 (Canceled)

47. (Original) The emulsion composition of Claim 30, wherein the emulsion has an average droplet size of less than about 1 micron.

48. (Original) The emulsion composition of Claim 30, wherein the emulsion has an average droplet size of about 0.1 microns to about 1 micron.

49. (Original) The emulsion composition of Claim 30, further comprising:

at least one component selected from a group consisting of lubricants, corrosion inhibitors, antifreezes, ignition delay modifiers, cetane improvers, stabilizers, and rheology modifiers.

50. (Original) The emulsion composition of Claim 49, wherein said flow of additives comprises said surfactant package and at least one of said at least one component.

51. (Original) The emulsion composition of Claim 49, wherein said flow of additives comprises a flow of said antifreeze and at least one of said components blended in a third in-line blending station.

Claims 52-55 (Canceled)

56. (Original) The emulsion composition of Claim 30, further comprising:

adding a coupling agent formed into a water soluble salt to said flow of additives.

Claims 57-80 (Canceled)